Please replace claim 10 with the following amended version thereof to incorporate the changes on the accompanying mark-up page:

10. (Amended) A method of regulating a concentration of methanol in a direct methanol fuel cell system comprising the steps of:

using a detector to sense changes in an output power level of said fuel cell and producing a signal indicative of said changes; and

using said signal to drive a concentration regulator which responsively actively controls, by increasing or decreasing, the amount of methanol supplied to said fuel cell's anode in response to changes sensed in said output power level.

Please replace claim 28 with the following amended version thereof to incorporate the changes on the accompanying mark-up page:

28. (Amended) A method of regulating a concentration of fuel in a direct oxidation fuel cell system comprising the steps of:

sensing changes in potential at an anode or load level of said fuel cell system; and

using said sensed changes in potential to drive a concentration regulator which responsively actively controls, by increasing or decreasing, the amount of methanol supplied to said fuel cell's anode when said power level increases and decreases, thereby minimizing cross-over of methanol through said fuel cell's membrane electrolyte.

Please add the following new claim 37:

37. (New) The method of regulating a concentration of methanol in a direct methanol fuel cell system, as defined in claim 10, including the further step of

when said detector senses a low output power level of said fuel cell and said concentration regulator indicates a high concentration of methanol, using said signal to drive said concentration regulator to responsively decrease the amount of methanol supplied to said anode thereby substantially minimizing cross-over of methanol through said fuel cell's membrane electrolyte.

Please add the following new claim 38:

38. (New) The method of regulating a concentration of methanol in a direct methanol fuel cell system, as defined in claim 10, including the further step of

when said detector senses a high output power level of said fuel cell and said concentration regulator indicates a low concentration of methanol, using said signal to drive said concentration regulator to responsively increase the amount of methanol supplied to said anode thereby providing optimal methanol concentration while substantially minimizing cross-over of methanol through said fuel cell's membrane electrolyte.

Please add the following new claim 39:

39. (New) The method of regulating a concentration of methanol in a direct methanol fuel cell system as defined in claim 28 including the further step of

when a change in said potential of said fuel cell indicates an increase in a high power operating fuel cell, and methanol concentration indicated by said concentration regulator is low, using said signal to drive said concentration regulator to responsively increase the amount of methanol supplied to said fuel cell's anode, to produce an optimal amount of methanol being supplied to said anode, while substantially minimizing methanol crossover.

Please add the following new claim 40:

40. (New) The method of regulating a concentration of methanol in a direct methanol fuel cell system as defined in claim 28 including the further step of

when a change in said potential of said fuel cell indicates an increase in a low power operating fuel cell, and methanol concentration indicated by said concentration regulator is

high, using said signal to drive said concentration regulator to responsively decrease the amount of methanol supplied to said fuel cell's anode, to substantially minimize methanol crossover.